

Band i, $\frac{3}{16}$ in. wide, Light chestnut with dark blotches.

Band ii, Light edge to No. i.

Band iii, $\frac{1}{8}$, Black.

Band iv, Light edge to band iii.

Band v, $\frac{3}{16}$ in. wide, Yellow, gradually merging to black of base.

Band vi, No. 6, Black to umbilicus.

Greatest diameter of shell measured $1\frac{1}{4}$ in.

In size they vary greatly. The following are the extremes.

Largest.

Smallest.

Greatest Diam. $1\frac{1}{2}$ in.

Greatest Diam. $1\frac{1}{16}$ in.

Smallest " $1\frac{1}{4}$ in.

Smallest " $\frac{7}{8}$ in.

Altitude, $\frac{7}{8}$ in.

Altitude, $\frac{9}{16}$ in.

DREDGING OFF SAN PEDRO.

BY H. N. LOWE.

Last summer, while the late Mr. Edward W. Roper was living in Long Beach, we (that is, Mr. Roper and myself) decided to do a little dredging off San Pedro. As there had been no extensive work done in that line at San Pedro in late years, we were in hopes of being rewarded with some rare shells and possibly some new species.

Mr. Roper sent for his dredging outfit which he had previously used at Eastport, Maine. We chartered the little sloop "North Star" and made three dredging trips with moderate success. We dredged in water from 5 to 20 fathoms depth, on muddy, sandy, gravelly, once on a bottom composed of dead bivalves for the most part, and two or three times among the rocks at 10 fathoms.

I made one subsequent trip with Mrs. M. Burton Williamson with the same boat and dredging outfit. We were greatly troubled in dredging by a species of red alga, which covered the bottom so thickly in places as to choke the mouth of the dredge, thus preventing the shells from entering. For the past two years, the ocean has been full of this moss, and at times the beach has been covered with it. From this alga in the dredge we obtained a few live specimens of *Calliostoma splendens* Cpr. and *C. gloriosum* Dall.

Besides the shells, we dredged a number of curious crustaceans and echinoderms not found on shore.

The following list includes all the species taken in the four dredging trips: all are live specimens unless marked dead:

List of Shells Dredged.

- Bittium asperum* Cpr., plentiful at 10 fathoms.
Cadulus fusiformis Pils. & Sharp, a few alive in sandy mud.
Calliostoma gloriosum Dall.
Calliostoma splendens (Mke.) Cpr.
Calliostoma tricolor Gabb. alive in sandy mud.
Callista subdiaphana Cpr. several young shells alive, one large dead one, one inch in diameter.
Chrysallida communis C. B. Ads.
Corbula chittyana C. B. Ads, two specimens alive at 20 fathoms soft mud. "This is exactly like West Indian specimens, and I should question its Pacific coast habitat if it were not that we have one worn valve apparently the same from Lower Cal." Dall.
Corbula luteola Cpr.
Crepidula adunca Sby., dead.
Crepidula norecelloides Nutt. var., two live ones of a very thin cup-shaped form with brown epidermis.
Cylichna attonsa Cpr.
Dentalium neohexagonum Pils., sandy mud at 10 fathoms.
Dentalium semipolatum Cpr. alive with *D. neohexagonum* Pils.
Drillia cancellata Cpr., 10 to 20 fathoms, fine gray sand.
Drillia empyrosia Dall., dead.
Drillia Hemphilli Stearns, 5 to 15 fathoms.
Drillia inermis Cpr.
Drillia pedroana Dall., dead.
Drillio pudica Hds.
Drillia quisqualis Hds., with *D. pudica* at 10 fathoms in sandy mud.
Eucosmia substriata Cpr.
Eulima micans Cpr.
Eulima rutila Cpr.
Eulima thersites Cpr., one live one at 15 fathoms.
Galerus mamillaris, on dead bivalves.
Halistylus pupoideus Cpr.
Labiosa undulata Gld., dead.
Lacuna mifasciata Cpr.

- Leda acuta* Conr., with *L. taphria*, rare.
Leda taphria Dall., plentiful at 5 fathoms.
Leptothyra sanguinea Cpr., one dead, "unusually elevated variety or malformation." Dall.
Lyonsia californica Conr.
Macoma yoldiformis Cpr.
Mangilia angulata Cpr., rare at 20 fathoms.
Mangilia sculpturata Dall., a few at 20 fathoms.
Mangilia variegata Cpr.
Modiola fornicata Cpr.
Myurella simplex Cpr.
Murex trialatus Sby., one fine specimen dredged from rocks at 10 fathoms, had beautiful recurved frills.
Muricidea barbarensis Gabb., one live one.
Muricidea incessa Brod.
Muricidea santa-rosæ Dall., rare at 10 fathoms.
Nucula exigua Ads., dead.
Nucula tenuis Ads., one live one at 20 fathoms.
Ocenebra foreolata Hds., dead.
Odostomia inflecta Cpr., one "live" example at 20 faths. soft mud.
Odostomia subplanata Cpr.
Olivella boetica Cpr., plentiful at 5 faths.
Pecten lutiauritus Cpr.
Placunanomia marroschisma Desh var., two specimens found inside of an old barnacle were of a dark chocolate color on the inside, diameter $2\frac{1}{2}$ inches.
Psamobia edentula Gabb., one young shell showing color pattern.
Scala bellastrata Cpr., one live specimen.
Semele pulchra Sby.
Semele rubropicta Dall.
Cadulus (Polyschides) quadrifissatus Cpr., with *Cadulus*.
Solen ensis L. var. *minor* Conr.
Solen sicarius Gld.
Tellina Idæ Dall., one dead shell.
Tellina modestus Cpr., 5 to 10 fathoms sandy mud.
Terebratella transversa Sby.
Tornatina culcitella Gld.
Tornatina inculta Gld.
Turbonilla chocolata Cpr.

Turbonilla tenuicula Gld.

Turbonilla torquata Gld.

Turbonilla tridentata Cpr.

Turbonilla sp? a few specimens dredged at 15 fathoms were of a light brown color and extremely slender. Held at Washington for further study.

Turritella Cooperi Cpr.

Venus toreuma Gld., one dead shell.

Volvula cylindrica Cpr.

NOTES ON THE MOLLUSKS OF LILYCASH CREEK.

BY FRANK C. BAKER.

Some time ago Mr. J. H. Handwerk and Mr. W. Chadwick began a systematic survey of the little stream known as Lilycash creek, near Joliet, Ill., dividing it into sections. Section I extended from the mouth of the creek, where it emptied into the Desplaines River, to the Plainfield road, a distance of about two and one-half miles. Later, they propose to take up section II, which will include the balance of the creek. A list of the species found within that area, which Mr. Handwerk was kind enough to submit to me for identification, may be of interest, since the region has afforded several peculiar new species, and is very prolific in Sphæriidæ.

The writer is indebted to Dr. V. Sterki and Prof. H. A. Pilsbry for the identification of several of the species enumerated.

The following species were collected :

<i>Sphærium stamineum</i> Conrad.	<i>Pisidium</i> sp. Now in the hands
<i>Sphærium lilycasheuse</i> Baker.	of Dr. V. Sterki, who believes it
<i>Sphærium striatulum</i> Lamarek.	to be a new species.
<i>Sphærium simile</i> Say.	<i>Pisidium roperi</i> Sterki.
<i>Sphærium occidentale</i> Prime.	<i>Limnæa humilis</i> Say.
<i>Calyculina transversa</i> Say.	<i>Limnæa desidiosa</i> Say.
<i>Calyculina truncata</i> Linsley.	<i>Plauorbis parvus</i> Say.
<i>Pisidium virginicum</i> Gmelin.	<i>Physa heterostropha</i> Say.
<i>Pisidium abditum</i> Haldeman.	<i>Pleurocera elevatum</i> Say.
<i>Pisidium compressum</i> Prime.	<i>Ammicola limosa</i> Say.